Datasheet for ABIN361492

# anti-SYN1 antibody (pSer549)

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## Overview

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|---|---|
| Quantity: | 100 µL |
| Target: | SYN1 |
| Binding Specificity: | pSer549 |
| Reactivity: | Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This SYN1 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC) |

## Product Details

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| Immunogen: | Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser549 conjugated to KLH |
| Specificity: | Specific for ~78k synapsin I doublet phosphorylated at Ser549. Immunolabeling of the synapsin I band is blocked by (-phosphatase treatment. |
| Cross-Reactivity: | Rat (Rattus) |
| Predicted Reactivity: | bovine, canine, human, mouse, non-human primate |
| Purification: | Antigen Affinity Purified from Pooled Serum |

## Target Details

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|---|---|
| Target: | SYN1 |

## Target Details

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| Alternative Name: | SYN1 (SYN1 Products) |
| Background: | Synapsin I plays a key role in synaptic plasticity in brain (Feng et al., 2002, Nayak et al., 1996). This effect is due in large part to the ability of the synapsins to regulate the availability of synaptic vesicles for release. The role of synapsin in synaptic plasticity and in synaptogensis is regulated by phosphorylation (Jovanovic et al., 2001, Kao et al., 2002). Ser 549 along with Ser 62 and Ser 67 are the sites of synapsin I that are phosphorylated by MAP kinase (Jovanovic et al., 1996). Phosphorylation and subsequent dephosphorylation of this site is thought to play a key role in synaptic vesicle trafficking. Anti-Phospho-Ser549 Synapsin Western blot of rat cortex lysate showing specific immunolabeling of the ~78k synapsin I phosphorylated at Ser549 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: (-Ptase). The blot is identical to the control except that it was incubated in (-Ptase (1200 units for 30 min) before being exposed to the phospho Ser549 synapsin I antibody. The immunolabeling is completely eliminated by treatment with (-Ptase. |
| Molecular Weight: | '78 kDa |
| Gene ID: | 281510 |
| UniProt: | P17599 |

## Application Details

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| Application Notes: | Recommended Dilution: WB: 1:1000 IHC: 1:500 Quality Control: Western blots performed on each lot. |
| Restrictions: | For Research Use only |

## Handling

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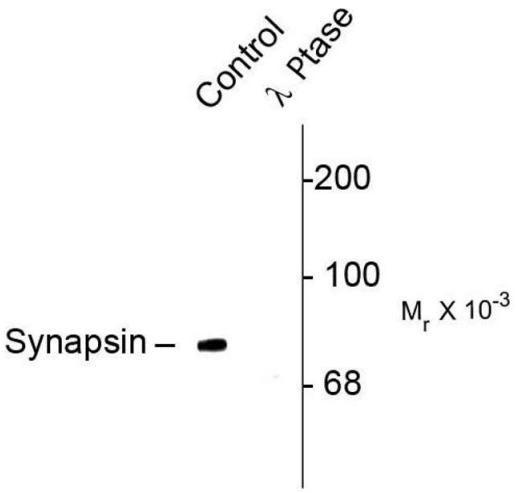
| Format: | Liquid |
| Buffer: | 100 µL in 10 mM HEPES (  pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50 % glycerol. |
| Storage: | -20 °C |

## Publications

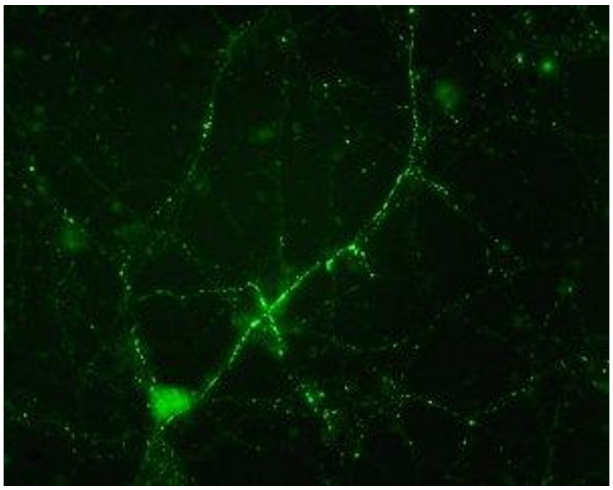
| | |
|---|---|
| Product cited in: | Yang, Xu, Li, Duan, Fu, Zhang, Zhao, Qiao, Chen, Geng, Che, Cao, Wang, Zhang, Long, He, Cui, Chen, Wang, Liu: "Cloning and characterization of a novel intracellular protein p48.2 that negatively regulates cell cycle progression." in: **The international journal of biochemistry & cell biology**, Vol. 41, Issue 11, pp. 2240-50, (2009) (PubMed). |

## Validation report #104331 for Multiplex Immunohistochemistry (mIHC)




### Western Blotting

**Image 1.** Western blots of rat cortex lysate showing specific immunolabeling of the ~78k synapsin I phosphorylated at Ser549 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: (-Ptase). The blot is identical to the control except that it was incubated in (-Ptase (1200 units for 30 min) before being exposed to the phospho Ser549 synapsin I antibody. The immunolabeling is completely eliminated by treatment with (-Ptase.



### Immunostaining

**Image 2.** Immunostaining of cultured mouse caudate neurons showing synapsin I when phosphorylated at Ser549. Cells and photo courtesy of QBMCellScience.